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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,820	06/28/2001	Joseph Chappell	50229-387 5779	
7590 04/07/2004		EXAMINER		
Robert L. Price, Esq.			CLOW, LORI A	
McDermott, Wi 600 13th St., N.	•	ART UNIT	PAPER NUMBER	
	C 20005-3096	1631		
			DATE MAILED: 04/07/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)		
Office Action Summary  The MAILING DATE of this communication		09/893,82		CHAPPELL ET AL.		
		Examiner	J	Art Unit		
			Di- D	1631		
		Lori A. Clo	•			
Period for						
THE MA  - Extension after SI  - If the pe  - If NO pe  - Failure Any rep	RTENED STATUTORY PERIOD FOR ALLING DATE OF THIS COMMUNIONS of time may be available under the provisions (6) MONTHS from the mailing date of this consider for reply specified above is less than thirty (3) striod for reply is specified above, the maximum state or reply within the set or extended period for reply by received by the Office later than three months a patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no eve unication. )) days, a reply within the statu tutory period will apply and wil will, by statute, cause the appli	nt, however, may a reply be tim tory minimum of thirty (30) day: I expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).		
Status						
1) 🖂 R	esponsive to communication(s) file	d on 28 June 2001.				
,	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)□ S	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositio	n of Claims					
44 5) □ 0 6) ⋈ 0 7) □ 0 8) □ 0 Applicatio 9) ⋈ TI 10) □ TI	claim(s) 107 and 163-242 is/are per a) Of the above claim(s) is/a claim(s) is/are allowed.  claim(s) 107 and 163-242 is/are rejectaim(s) is/are objected to.  claim(s) is/are objected to.  claim(s) are subject to restrict to restrict to the specification is objected to by the drawing(s) filed on is/are:  applicant may not request that any objected deplacement drawing sheet(s) including	re withdrawn from corected.  Stion and/or election rection and/or election and/or elec	equirement.  objected to by the legender of th	e 37 CFR 1.85(a).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority un	der 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice 3) Information	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (Feation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:			

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#### **DETAILED ACTION**

Claims 107 and 163-242 are currently pending in the instant application. Claims 1-106 and 108-162 were cancelled in the preliminary amendment file 28 June 2001.

#### **Information Disclosure Statement**

The Information Disclosure Statement filed 28 June 2001 has been considered. A signed copy of PTO form 1449 is included in this Office Action.

### **Specification**

The amendment filed 18 June 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The amendment to the description of Figure 1 says that cylinders pictured as cylinders 1-8 and A are in the NH<sub>2</sub> domain and cylinders C-I are in the COOH domain. This information was not part of the disclosure as originally filed and cannot be introduced by way of amendment without support in the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 107 and 163-242 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

## Written Description

Claim 107 is directed to an isolated synthase having a region with 40% or greater identity to residues 579 to 847 SEQ ID NO:44, wherein one or more amino acid residues of said synthase that align with amino acids at positions 584, 587, 606, 609, 610, 688, 713, 714, 715, 716, 719, 753, 757, 831, 834, 835, 839, 841, and 842 of SEQ ID NO:44 are residues other than the arrangements set forth (in a table). The specification fails to describe the positions listed in the recited table as positions that are specific to SEQ ID NO:44. The table in the specification recites residues 1-19 and it is not stated that these correspond to residues 584, 587, 606, 609, 610, 688, 713, 714, 715, 716, 719, 753, 757, 831, 834, 835, 839, 841, and 842 of SEQ ID NO: 44.

New Matter

Claims 163, 164, and 180-242 contain new matter.

Specifically, in claim 163, there is no support in the instant specification for a synthase that has 50% or greater sequence identity to residues 579 to 847 of SEQ ID NO: 44. In the same fashion, there is no support in claim 164 for a synthase that has 60% or greater sequence identity to residues 579 to 847 of SEQ ID NO: 44. The specification does provide for 40% or greater

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sequence identity with regard to SEQ ID NO: 44 at page 7, however, there is no recited support for 50% and 60%.

Claims 180-242 recite the synthase of claim 107 wherein said amino acid at various recited positions is selected from the group consisting of various combinations of three amino acids. There is no support in the specification for these recited combinations of amino acids as they relate to SEQ ID NO:44. The specification provides support for these combinations **only** in reference to SEQ ID NO:2, as evidenced on page 3, lines 20-34.

Applicant is advised that new matter may not be introduced by way of preliminary amendment, unless certain conditions are met. In the instant case, those conditions have not been satisfied. See MPEP 608.04(b) and 714.03.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 168-179 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 168-179 recite synthases wherein said product is a certain hydrocarbon. It is unclear how the products that are made are limiting the product claimed. Clarification is requested.

No Claims Are Allowed.

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### Inquiries

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242, or (703) 308-4028.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori A. Clow, Ph.D., whose telephone number is (571) 272-0715. The examiner can normally be reached on Monday-Friday from 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward, Ph.D., can be reached on (571) 272-0722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Legal Instrument Examiner, Tina Plunkett, whose telephone number is (703) 305-3524, or to the Technical Center receptionist whose telephone number is (571) 272-0549.

MARJORIE MORAN
FATENT EXAMINER
Jayous a. Source
415104

April 4, 2004

Lori A. Clow, Ph.D.

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